



TOWN OF NORTHBOROUGH BOARD OF HEALTH

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MEMORANDUM

TO: Residents who may own private bedrock wells in Northborough

FROM: Jamie Terry, Health Agent

DATE: March 22, 2011

RE: USGS study regarding private bedrock drinking water wells and naturally occurring arsenic and uranium levels

The U.S. Geological Survey (USGS) released a study yesterday, which indicates that levels of naturally occurring arsenic and uranium may exceed drinking water standards in some private drinking water wells in central and northeastern Massachusetts, including the Town of Northborough. **Although the public health risk associated with the findings of this report are very low in regard to both of the analyzed materials, it is strongly recommended that you have your water tested for arsenic and uranium.**

- This study relates to naturally occurring arsenic and/or uranium in private bedrock wells only. Public water supply wells are not considered at risk as public drinking water wells are tested for these (and other contaminants) on a continuous basis.
- In 2001 the recommended arsenic contamination level for private wells went from 50 ppb to 10 ppb. Note: These recommended levels are very conservative and assume every person drinks from the same source every day for their entire life roughly 2 gallons per day/person.
- Of the estimated 90,000 private bedrock wells that run along the Clinton/Newbury fault line it is predicted that 5,700 wells will exceed the 2001 arsenic standard and that 3,300 wells will exceed the 2003 uranium standard. These numbers represent roughly 5 % anticipated exceeded levels for arsenic and roughly 3 % anticipated exceeded levels for uranium.
- Please **DO NOT PANIC, BUT GET YOUR WELL TESTED**. This should be relatively easy and fairly inexpensive.
- There are 34 laboratories listed on the DEP website which are certified to test for arsenic, and there are 6 laboratories which are certified to test for uranium. If you need assistance accessing this information please contact my office at 508-393-5009. The median cost for these tests are: \$ 15-30 arsenic and \$ 60-100 uranium.

Note: If arsenic does come back above recommended levels than the lab will need to determine if it is arsenic 3 or arsenic 5 as each have different treatment options.

Ultimately this report does not represent an immediate public health threat; however the report shows that it is extremely prudent that homeowners who have private bedrock wells in Northborough test their water quality for arsenic and uranium levels.

If a test is performed and does not show elevated levels of arsenic and/or uranium a future test is not necessary for another 10 years (although homeowners are always recommended to test their private drinking water wells for other contaminants every 2-3 years).

There are many resources available to help homeowners work through this report and see how it may directly impact you. The Massachusetts Department of Environmental Protection (DEP) has provided a great deal of information on their website, please go to the below address to review: <http://www.mass.gov/dep/water/drinking/au/aulocate.htm> . Also on that site is a link to arsenic and uranium health effects information from MDPH (Massachusetts Department of Public Health), information regarding treatment options that are available for wells with levels above the drinking water standard, and additional information from U.S. EPA regarding health effects and water treatment issues.

Also of significant assistance is a mapping feature that allows each homeowner to look up by their specific address to see what the likelihood is of their well to be impacted. The link to this feature is: <http://www.mass.gov/dep/water/drinking/au/autowns.htm> .

Further the map for the entire Town relating to arsenic can be found by clicking: http://www.mass.gov/dep/water/drinking/au/maps/northborough_a.pdf .

A map for the entire Town relating to uranium can be found by clicking: http://www.mass.gov/dep/water/drinking/au/maps/northborough_u.pdf .

For more information please see the above listed websites, contact the call center at 211 or contact the local Northborough Health Department at 508-393-5009.

If you decide to have your water quality tested and would like assistance in reviewing the results, please feel free to contact me at 508-393-5009. In addition, if you would like to provide a copy to our office we will keep it in your address file for future reference.

